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_/	В	SUPPLIES OR SERVIC	ES AND PRICES/COS	STS	2			PART III LIST O		S, EXHIBITS AN	D OTHER ATTA	ACH.	O
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24.	ADMIN	IISTERED BY (If other tha	an Item 7)	CODE				25. PAYMENT WILI	L BE MADE BY		CODE		
26.	NAME	OF CONTRACTING OFF	FICER (Type or print)					27. UNITED STATE	S OF AMERICA		28. AW	ARD D	ATE
								(Signa	ature of Contracting	Officer)			

SECTION B—SUPPLIES OR SERVICES AND PRICES/COSTS

ARTICLE B.1. BRIEF DESCRIPTION OF SUPPLIES OR SERVICES

The major objectives of this program are: 1) to refine for use in clinical laboratories, one or more nucleic-acid based techniques that will be feasible for the direct detection of blood-borne viruses in donors of organs for transplantation to reduce the antibody-negative window period between infectivity and detection to the shortest possible time and, when possible, obviate the need for indirect antibody tests; and 2) to file for investigational new drug exemption (IND) with the Food and Drug Administration (FDA), and submit and obtain approval for product license applications (PLAs).

ARTICLE B.2. ESTIMATED COST

The final contract will contain the price/cost provisions agreed upon by the Government and the Offeror. The Government anticipates this will be a cost-sharing contract.

SECTION C—DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

ARTICLE C.1. STATEMENT OF WORK

- a. Independently and not as an agent of the Government the contractor shall be required to furnish all the necessary services, qualified personnel, material, equipment, and facilities, not otherwise provided by the Government, as needed to perform the Statement of Work below:
- b. The contractor shall deliver the items specified in ARTICLE F.1 to the destinations indicated.
- c. The contractor shall: 1) Refine for use in clinical laboratories, one or more nucleic-acid based techniques that will be feasible for the direct detection of blood-borne viruses in donors of organs for transplantation to reduce the antibody-negative window period of infectivity and detection to the shortest possible time and, when possible, obviate the need for antibody tests: and 2) to file for INDs with the Food and Drug Administration (FDA), and submit and obtain approval for product license applications (PLAs).
- d. The study schedule is as follows:

Phase I: Preclinical Phase

The preclinical phase for refinement of an organ donor assay shall be completed within 12 months from contract award.

Phase II: Clinical Phase

All clinical studies conducted at approved clinical trial sites must be completed and the results submitted to the Center for Biologies Evaluation and Research (CBER) within a period of 20 months from receipt of the investigational new drug (IND). An additional 4 months will allow for review of data by CBER officials and, ultimately, licensure of the procedure.

e. The contractor shall perform the following activities:

PHASE I: Preclinical Studies/Test Refinement

- 1. Refine a procedure for screening of neomort organ donors for blood-borne viruses. The contractor must:
 - Demonstrate that the organ donor assay detects minimal amounts of viral nucleic acids (RNA and/or other viral nucleic acids that appear at the same time or before the earliest

- appearance of viral RNA circulating in plasma) specific for HIV-1 and HCV. If specimens other than blood are to be used, determine the best tissue to use as a test material source.
- b. Have and describe plans to adapt the test methods to a multiplexing format that will detect multiple blood-borne viruses (two or more viruses) in the same test. The two highest priority viruses to be detected are HIV-1 and HCV. The testing method(s) proposed must be able to detect each of these viruses, in multiplexing format. If additional viruses are included in the test system (e.g., HBV, HIV-2, etc.), they are also to be incorporated into a multiplex format.
- c. Demonstrate that these assays are suitable for use on blood or tissue samples from organ donors.
- d. Provide a technically easy procedure so as to be readily usable by less practiced laboratory staff at odd hours, day or night, weekday or weekend.
- e. Provide a test that is rapid (<4-6 hours from sample receipt to report), highly specific and sensitive.
- f. Propose and begin to develop a confirmatory test for the viruses initially targeted, unless the base procedure is 100% specific.
- 2. Validate assay(s) and subject them to process controls.
- 3. Utilize good laboratory practices to ensure the acquisition of acceptable supporting data for the submission of INDs and PLAs to the FDA.
- 4. Address carefully issues related to the FDA's general regulatory concerns regarding IND approval. Important points to be considered include preparation and processing of specimens; selection of target nucleic acid species; genetic drift or mutation of targeted infectious agents; development and standardization of capture and reporter probes; construction of internal controls for human RNA/DNA, non-target sequences of the same infectious agent, and different pathogens; determining optimum tissue source for test sample in the case of screening organ donors; quality control of the manufacturing process; and design of preclinical evaluation studies. The NHLBI must be notified and usually present at any meetings with the FDA and the contractor and/or such subcontractors as may exist that relate to this project or any part thereof.
- 5. Develop a standardized test protocol that will be used for preclinical testing including: (I) Evaluation of specificity, (ii) evaluation of sensitivity with validation of end-point, and (iii) studies to determine the analytical sensitivities for the clinical trial tests. Biostatistical considerations indicate that at least 600 specificity specimens will be necessary to validate the procedure. If the assay material is blood, random normal blood or plasma donor specimens and at least 100 test-positive sensitivity specimens shall be used. If the test material is tissue (lymph node aspirate, bone marrow, etc), specimens of the same type of tissue shall be utilized. Preclinical testing must be completed to submit an IND and proceed to the clinical trial testing. The contractor must describe completely the sources of samples for these sensitivity studies, including the resolution of discrepant results.

The NHLBI blood specimen repository has been storing specimens from a variety of epidemiological studies supported by the Institute since 1974. The repository contains blood samples from 6 sequentially bled hemophiliacs who became infected with HIV during the course

of a large study. Another source of sequential specimens for detecting HIV nucleic acids during the seronegative window of infectivity is the collection of plasma and serum from the NHLBI longitudinal study of approximately 14 chimpanzees experimentally infected with HIV. In addition, the Institute's blood specimen repository has serial samples from over 100 blood recipients who developed post-transfusion HCV. These specimens will be used to prepare coded panels which the Institute will make available to the successful contractor to satisfy at least some of the needs for data to support either the IND or the PLA applications. The contractor must have or develop additional sources of samples to fulfill the requirements for test licensure.

- 6. Submit IND applications in accordance with FDA policies and guidelines.
- 7. Propose an acceptable comparative test (s), providing data on which to base its use as a "gold standard," since there is no "gold standard" licensed test that can be used to confirm the test-positive specimens. This test could also be proposed as a confirmatory test.

PHASE II: Clinical Trials/Test Validation

Commencement of Phase II is contingent on successful completion of Phase I. Phase II will be the actual implementation of the definitive clinical trials to support licensure.

Specifically, the contractor shall provide the following:

- 1. Design and organize the definitive clinical studies to support a PLA. These studies shall be performed by independent investigators at clinical trial sites that mimic expected use, i.e., a test intended for screening of organ donors must be validated in a transplantation or transplantation-like setting. The offeror shall propose how the investigational assay system will be compared to the proposed "gold standard" system and how discrepant results will be resolved. Specimens evaluated in the clinical trial may be either linked or unlinked to human subjects. A study with linked samples requires Institutional Review Board (IRB) approval and the informed consent of the donor or donor's family.
- 2. Conduct specificity testing with specimens of blood or tissue from organ donors, potential organ donors and other recently deceased patients to mimic the clinical situation. Testing must be done at odd hours, day or night, weekday or weekend, similar to the timing of the recruitment of organ donors. [For solicitation purposes, the offeror must specify the proposed sources of specimens (e.g., organ donor specimens and other recently deceased individuals) and propose the number of specimens desired and explain how the number was derived.]
- 3. Determine sensitivity and specificity with an estimated confidence limit, describing how the limit was selected and how the study will provide it. If the test material is tissue, (e.g. lymph node aspirate, bone marrow, etc.), experimental protocols utilizing chimpanzees may be valuable. These animals, infected with HIV, could be the source of invaluable longitudinal specimens which could demonstrate the sensitivity of the assay in detecting HIV during the seronegative window of infectivity.
- 4. Perform nonspecificity studies for each virus with at least 200 samples to determine whether certain specimens will produce non-specific results. These shall include samples from individuals with diverse viral diseases who could have high levels of non-specific nucleic acids that might interfere with the test. In addition, because "viral drift" may potentially result in decreased sensitivity, these samples shall include some geographically diverse samples [For solicitation purposes, the offeror must describe the proposed sources.]

ARTICLE C.2. REPORTING REQUIREMENTS

1) Technical Progress Reports

In addition to those reports required by SECTION I and other terms of this contract, the Contractor shall prepare and submit the following reports in the manner stated below:

- a. Quarterly Reports; to include a description of the activities during the reporting period including subcontract activities. The narrative must include how progress in the particular quarter compares with progress predicted on a pert chart (or other project management charting) prepared by the contractor. Identify any problems that have arisen and how they have been or will be resolved. Activities planned for the ensuing reporting period shall be discussed. Five copies will be due 14 calendar days after the end of each quarter.
- b. Annual reports; to include a summation of the results of the entire contract work for the period covered. The annual report should include the significant data obtained during the year and identify progress in relationship to the objectives outlined at the beginning of the year. Significant technical problems should be clearly identified. The narrative must include how progress over the annual period compares with progress predicted on a pert chart (or other project management charting) prepared by the contractor. In addition, a projection of the next year's technical activities shall be included. The report must identify the objectives originally planned for the subsequent funding period and justify any deviation from this plan. It must indicate the procedures to be employed to overcome any significant technical problems encountered during the reporting period.

The progress chart shall serve as the basis for assessing the actual progress during the particular reporting period. Any deviation from the progress chart must be explained and corrective measures shall be discussed. If necessary, the progress chart shall be readjusted to reflect the true progress achieved and future work to be performed. The first annual report shall be submitted within 12 months after the effective date of the contract and annually thereafter (specific dates shall be stated in the contract). An original and 5 copies are required.

- c. <u>Draft Final Report</u>; the Contractor shall provide the Contracting Officer with two copies of the final report in <u>draft</u> form 30 working days before the Final Report is due. The Project Officer shall review the draft report and provide the Contractor with comments within 15 working days after receipt. The final report shall be corrected if necessary and the final version delivered by or before the expiration date of the contract.
- d. <u>Final Report</u>; to include a summation of the work performed and results obtained for the entire contract period of performance. This report shall be in sufficient detail to describe comprehensively the results achieved. The final report shall be submitted upon completion of contract objectives. The Contractor shall submit, with the final report, a summary (not to exceed 200 words) of salient results achieved during the performance of the contract. An original and 20 copies will be required.

e. Other Reports/Deliverables

1. PROGRESS REPORT FOR CLINICAL RESEARCH STUDY POPULATIONS

If linked specimens are used in the study, the Contractor shall submit the following information for each study being performed under this contract in the format presented below. The report shall be submitted in accordance with ARTICLE F.1. DELIVERIES of this contract.

PROGRESS REPORT FORMAT FOR EACH STUDY

Study	Title:
-------	--------

Date:

Provide the number of subjects enrolled in the study to date according to the following categories:

	American Indian or Alaskan Native	Asian or Pacific Islander	Black, not of Hispanic Origin	Hispanic	White, not of Hispanic Origin	Other or Unknown	Total
Female				•			
Male							
Unknown							
TOTAL							

Subpopulations of the minority groups should also be reported, using a similar format.

2) Place of Delivery

One copy of each deliverable shall be sent to the Contracting Officer. All other copies shall be furnished to the Project Officer. All reports shall be mailed or otherwise delivered to the following addresses:

Project Officer, NHLBI, Bethesda, MD 20892

Contracting Officer, NHLBI, Bethesda, MD 20892

(Full addresses to be completed later.)

SECTION D - PACKAGING, MARKING AND SHIPPING

All deliverables required under this contract shall be packaged, marked and shipped in accordance with Government specifications. The Contractor shall guarantee that all required materials shall be delivered in immediate usable and acceptable condition.

SECTION E - INSPECTION AND ACCEPTANCE

- a. The Contracting Officer or the duly authorized representative will perform inspection and acceptance of materials and services to be provided.
- b. For the purpose of this ARTICLE, the Project Officer is the authorized representative of the Contracting Officer.
- c. Inspection and acceptance will be performed at: National Institutes of Health, National Heart, Lung, and Blood Institute, BETHESDA, MD 20892-7902.
 - Acceptance may be presumed unless otherwise indicated in writing by the Contracting Officer or the duly authorized representative within 30 days of receipt.
- d. This contract incorporates the following clause by reference, with the same force and effect as if it were given in full text. Upon request, the Contracting Officer will make its full text available.

FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1) CLAUSE: 52.246-9, INSPECTION OF RESEARCH AND DEVELOPMENT - (SHORT FORM) (APRIL 1984).

SECTION F - DELIVERIES OR PERFORMANCE

ARTICLE F.1. DELIVERIES

- a. Satisfactory performance of the final contract shall be deemed to occur upon delivery and acceptance by the Contracting Officer, or the duly authorized representative, of the following items in accordance with the stated delivery schedule:
 - (1) The items specified below as described in <u>SECTION C</u>, <u>ARTICLE C.2.</u> will be required to be delivered F.O.B. Destination as set forth in FAR 52.247-35, F.O.B. DESTINATION, WITHIN CONSIGNEES PREMISES (APRIL 1984), and in accordance with and by the date(s) specified below [and any specifications stated in <u>SECTION D</u>, <u>PACKAGING AND MARKING</u>, of the contract]:

<u>Iten</u>	<u>Description</u>		<u>Quantity</u>	Delivery Schedule
(a)	Quarterly Reports w/progress char	t	Original & 5 copies	Quarterly
(b)	Annual Reports w/progress chart		Original & 5 copies	9/30/00, 9/30/01
(c)	Draft Final Report		2 copies	8/29/02
(d)	Final Report	Origin	al & 20 copies	9/30/02
(e)	Contractor/CBER Related Docume	ents	2 Copies	See below
(f)	Progress Report for Clinical Resear	rch	Original & 5 copies	9/30/00, 9/30/01, 9/30/02

In addition to quarterly and annual progress reports, the contractor shall make available to the government a copy of the progress chart related to the projected course of the workscope. Also, copies of documents related to negotiations between the contractor and CBER officials shall be submitted to the Project Officer within two weeks of said negotiations. This shall include preclinical and clinical protocols as well as information from the study.

Other Deliverables:

- g. <u>Financial Reports:</u> Quarterly financial reports which summarize the status of costs incurred under the contract shall be prepared in accordance with "Instructions for Completing, Form NIH 2706." Financial reports will not be required for contracts submitting regular monthly invoices.
- h. SF 294 Report: Subcontracting Report for Individual Projects shall be submitted semi-annually.

SECTION G—CONTRACT ADMINISTRATION DATA

(NOTE: See ?Sample Contract Format - General" for potential Section G. Articles which will be accessed at the following web site: http://www4.od.nih.gov/ocm/contracts/rfps/sampkt.htm

SECTION H—SPECIAL CONTRACT REQUIREMENTS

(NOTE: See ?Sample Contract Format - General" for potential Section H. Articles which will be accessed at the following web site: http://www4.od.nih.gov/ocm/contracts/rfps/sampkt.htm

PART II— CONTRACT CLAUSES

SECTION I—CONTRACT CLAUSES

ARTICLE I.1. GENERAL CLAUSES FOR A NEGOTIATED COST REIMBURSEMENT RESEARCH AND DEVELOPMENT CONTRACT [Educational, Nonprofit, or other depending on organizational status of offeror; selected appropriate article]—CLAUSES INCORPORATED BY REFERENCE (FEBRUARY 1998) (NOTE: The following section for General Clause Listing can be accessed at the following web site: http://rcb.nci.nih.gov/Clauses/Clauses.html

ARTICLE I.2. AUTHORIZED SUBSTITUTIONS OF CLAUSES

- a. ALTERNATE I of FAR Clause 52.216-11, COST CONTRACT NO FEE (APRIL 1984) is added.
- b. FAR Clause 52.232-20, LIMITATION OF COST (APRIL 1984), is deleted in its entirety and FAR Clause 52.232-22, LIMITATION OF FUNDS (APRIL 1984), is substituted therefor.

ARTICLE I.3. ADDITIONAL CONTRACT CLAUSES

This contract incorporates the following clauses by reference (unless otherwise noted), with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available.

- a. FEDERAL ACQUISITION REGULATION (FAR) (48 CFR CHAPTER 1) CLAUSES:
 - (1) FAR 52.224-1, Privacy Act Notification (APRIL 1984)
 - (2) FAR 52.224-2, Privacy Act (APRIL 1984)
 - (3) FAR 52.243-2, Changes-Cost Reimbursement (AUGUST 1987). Alternate V (APRIL 1984)
- b. DEPARTMENT OF HEALTH AND HUMAN SERVICES ACQUISITION REGULATIONS/PUBLIC HEALTH SERVICE ACQUISITION REGULATIONS (HHSAR) (PHSAR) (48 CFR CHAPTER 3) CLAUSES:

This contract incorporates the following clauses by reference, (unless otherwise noted) with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available.

- (1) PHS 352.223-70, Safety and Health (AUGUST 1997), is hereby incorporated in full text.
- (2) PHS 352.280-1b, Protection of Human Subjects (OCTOBER 1986).
- c. NATIONAL INSTITUTES OF HEALTH (NIH) RESEARCH CONTRACTING (RC) CLAUSES:

The following clause(s) are attached and made a part of this contract:

NIH(RC)-1, Invoice/Financing for Cost Reimbursment Type Contracts

NIH(RC)-7, Procurement of Certain Equipment (APRIL 1984) (OMB Bulletin 81-16).

PART III—LIST OF DOCUMENTS, EXHIBITS, AND OTHER ATTACHMENTS SECTION J—LIST OF ATTACHMENTS

See listing of RFP and Contract attachments in Section L, Part III below.

PART IV—REPRESENTATIONS AND INSTRUCTIONS

SECTION K—REPRESENTATIONS AND CERTIFICATIONS

The Representations, Certifications, and Other Statements of Offerors or Quoters (Negotiated) for this RFP are available at: http://www4.od.nih.gov/ocm/contracts/rfps/REPCERT. Please see also the instructions for the attached form in the listing of RFP and Contract attachments in Section L, Part II below.

SECTION L—INSTRUCTIONS, CONDITIONS, AND NOTICES TO OFFERORS

THIS SECTION OF THE RFP CONSISTS OF THE FOLLOWING SECTIONS:

- I. Specific RFP Instructions and Provisions,
- II. Applicable RFP References, and
- III. Project Information

I. SPECIFIC RFP INSTRUCTIONS AND PROVISIONS

NOTICE TO OFFERORS: This section contains proposal instructions and information which are specifically related to this acquisition. The information provided below is only a portion of the instructions and notices required for the submission of a proposal. References to additional, more general, information and forms regarding proposal preparation are contained under Section III. Applicable RFP References.

The following specific RFP instructions and provisions apply to this Request For Proposal:

- A. Proposal Intent Response Sheet (submit by January 11, 1999)
- B. Packaging and Delivery of Proposal
- C. SIC Code and Small Business Size Standard
- D. Number and Type of Award(s)
- E. Estimate of Effort and Travel
- F. Service of Protest
- G. Technical Proposal Table of Contents
- H. Page Limits
- I. Other Provisions
- J. Special Requirements

A. PROPOSAL INTENT RESPONSE SHEET

RFP No. NHLBI-HB-99-10

TITLE OF RFP: Refinement of New Assays for Direct Detection of Nucleic Acids in Donated Organs

FURNISH THE INFORMATION REQUESTED BELOW AND RETURN THIS PAGE BY **January 11**, **1999**. YOUR EXPRESSION OF INTENT IS NOT BINDING BUT WILL ASSIST US IN PLANNING FOR PROPOSAL EVALUATION.

I INTEND TO SUBMIT A PROPOSAL

COMPANY/INSTITUTION NAME:

ADDRESS:

PROJECT DIRECTOR'S NAME:

TITLE:

TELEPHONE NUMBER:

NAMES OF COLLABORATING INSTITUTIONS AND INVESTIGATORS (include Subcontractors and Consultants):

RETURN TO:

Attention: Dr. James Scheirer Review Branch NIH, NHLBI 6701 ROCKLEDGE DR MSC 7924 BETHESDA MD 20892-7924

or FAX TO: Dr. James Scheirer at (301) 480-3541

B. PACKAGING AND DELIVERY OF THE PROPOSAL

Your proposal shall be organized as specified in the "Standard RFP Instructions and Provisions." Shipment and marking shall be as follows:

EXTERNAL PACKAGE MARKING

In addition to the address cited below, mark each package as follows:

"RFP NO. NHLBI-HB-99-10

TO BE OPENED BY AUTHORIZED GOVERNMENT PERSONNEL ONLY"

The numbers of copies required of each part of your proposal are:

TECHNICAL PROPOSAL: ORIGINAL* AND Fifteen (15) COPIES

BUSINESS PROPOSAL: ORIGINAL* AND Six (6) COPIES

DELIVER PROPOSAL TO:

Review Branch, Division of Extramural Affairs National Heart, Lung, and Blood Institute, NIH Rockledge Building, Room 7091 6701 ROCKLEDGE DR MSC 7924 BETHESDA MD 20892-7924

*THE ORIGINAL PROPOSAL MUST BE READILY ACCESSIBLE FOR DATE STAMPING. IN ADDITION, EVERY SEPARATELY BOUND VOLUME **MUST** CONTAIN THE ORGANIZATION'S NAME, ADDRESS, AND RFP NUMBER

C. SIC CODE AND SMALL BUSINESS SIZE STANDARD

NOTE: The following information is to be used by the offeror in preparing its Representations and Certifications, specifically in completing the provisions entitled, SMALL BUSINESS PROGRAM REPRESENTATIONS, FAR 52.219-1:

The standard industrial classification (SIC) code for this acquisition is 8731.

The small business size standard is 500 employees.

THIS REQUIREMENT IS **NOT** SET-ASIDE FOR SMALL BUSINESS.

D. NUMBER AND TYPE OF AWARD(S)

It is anticipated that 1 award will be made from this solicitation and this award will be made on/about September 30, 1999. It is anticipated that the award from this solicitation will be a multiple-year cost reimbursement type completion contract with a period of performance September 30, 1999 to September 29, 2002. A cost-sharing contract is a possibility.

E. LEVEL OF EFFORT AND TRAVEL

The level of effort (time) devoted to the project must be compatible with the scientific and technical approach proposed. The number of full-time employees necessary to perform the work will be dependent upon the type of work proposed and the state of development. The principal investigator must have training and actual experience in at least two of the following fields: molecular virology, microbiology,

immunology, biochemistry, hematology, and transfusion/transplantation medicine. The investigational team, including any proposed subcontractors or consultants, must have demonstrated experience in the development and modification of laboratory test procedures. This team should also have experience appropriate to the work proposed, such as serology, microscopy, pathology, virology/bacteriology, and biohazard containment.

Travel: The offeror should propose four (4) meetings per year for two (2) people in Bethesda, Maryland. Travel to attend these meetings should be based on two (2) days.

F. SERVICE OF PROTEST

In accordance with FAR 52.233-2 SERVICE OF PROTEST (NOV 1988):

(a) Protests, as defined in Section 33.101 of the Federal Acquisition Regulation, that are filed directly with an agency, and copies of any protests that are filed with the General accounting Office (GAO) shall be served on the Contracting Officer (addressed as follows) by obtaining written and dated acknowledgment of receipt from:

Ms. Lynda A. Bindseil

Address: National Institutes of Health

National Heart, Lung, and Blood Institute

Contracts Operations Branch Rockledge 2, Room 6134

6701 ROCKLEDGE DR MSC 7902

BETHESDA MD 20892-7902

The copy of any protest shall be received in the office designated above within one day of filing a protest with GAO.

G. TECHNICAL PROPOSAL TABLE OF CONTENTS

Please number each page of text. Type density and size must be 10-12 points. If constant spacing is used, there should be no more than 15 cpi, whereas proportional spacing should provide an average of no more than 15 cpi. There must be no more than six lines of text within a vertical inch.

The technical proposal should be organized as follows:

1. TECHNICAL PROPOSAL COVER SHEET (Form is located in the Streamlined RFP				
References under "FORMS, FORMATS, ATTACHMENTS" Page 1				
2. TECHNICAL PROPOSAL TABLE OF CONTENTS				
3. ABSTRACT Page 3				
State the proposal's objectives. Briefly and concisely describe the research design and methods for achieving these goals. DO NOT EXCEED one page in providing the abstract. Identify the RFP Number, Institution and Principal Investigator on the abstract.				
4. TECHNICAL PLAN Page 4				
Defents Technical Draw and Instructional acted in the Standard DED Instructions and Drawinian and draw				

Refer to Technical Proposal Instructions located in the Standard RFP Instructions and Provisions under Streamlined RFP References for more detail.

A. PERSONNEL

(1) List of all Personnel in the project including Subcontractors, Consultants/Collaborators, by name, title, department and organization
PROVIDE TWO-PAGE BIOSKETCHES FOR INVESTIGATORS AND NARRATIVES, INCLUDING ROLE IN PROGRAM, EXPERTISE, AND RELATED EXPERIENCES, FOR:
(2) Principal Investigator/Project Director
(3) Other Investigators
(4) Additional Personnel
B. PROPOSED APPROACH (no more than 50 PAGES single-spaced)
(1) Background and Rationale
(2) Experimental Design Page #
(3) Methods
(4) Risks and Protection from Risks
C. FACILITIES, EQUIPMENT AND OTHER RESOURCES Page #
List/describe all facilities, equipment and other resources available for this project.
D. <u>OTHER CONSIDERATIONS/DOCUMENTATION</u>
(1) Documentation of submission to IRB of protocol and consents
(2) Letter of agreement with Industry documenting access to agent (and placebo, if indicated)
(3) Documentation of submission of appropriate forms to FDA (or appropriate agency)
5. OTHER SUPPORT Page #
Complete the Form "Summary of Current and Proposed Activities." All key personnel must be listed on this form. The form is located in the Streamlined RFP References under "FORMS, FORMATS, ATTACHMENTS"
6. TECHNICAL PROPOSAL COST INFORMATION Page #
The form is located in the Streamlined RFP References under <u>"FORMS, FORMATS, ATTACHMENTS"</u>
7. LITERATURE CITED Page #
8. APPENDICES
Appendices shall not exceed 100 pages single-spaced. List each Appendix and identify the number of pages for each one. Appendices must be clear and legible, and easily located.

H. Page Limits

The technical proposed approach (Section 4B, above) shall be limited to 50 pages single-spaced. The cover sheet, abstract, table of contents, personnel, facilities, equipment and resources, other considerations, other support, cost information, and literature cited do not count against the 50 page limit. Appendices shall be limited to 100 pages single-spaced.

I. OTHER PROVISIONS

PUBLICATION AND PUBLICITY (It is anticipated that this clause will appear in the contract.)

The contractor shall acknowledge the support of the National Institutes of Health whenever publicizing the work under this contract in any media by including an acknowledgment substantially as follows:

"This project has been funded in whole or in part with Federal funds from the National Heart, Lung, and Blood Institute, National Institutes of Health, under Contract No. . . ."

J. SPECIAL REQUIREMENTS

- (1) Offerors *must* address the patent issue surrounding RNA testing for HCV in its initial proposal submission.
- (2) Offerors *must* provide suitable evidence that any patent issues surrounding RNA testing for HCV have been acceptably addressed and resolved. An award will not be made to any offeror which failed to rectify any unresolved patent issues at the time a Request for Final Proposal is due.
- (3) The concept of a cost-sharing contract with the successful offeror is a possibility.
- (4) The government may, under special arrangements, provide the use of 2-3 chimpanzees at the NHLBI colony at the Southwest Foundation for Biomedical Research, San Antonio, Texas. Panels of plasma and/or serum from the NHLBI repository may also be made available to contractors. The NHLBI blood specimen repository has been storing specimens from a variety of epidemiological studies supported by the Institute since 1974. The repository contains blood samples from 6 sequentially bled hemophiliacs who became infected with HIV during the course of a large study. Another source of sequential specimens for detecting HIV nucleic acids during the seronegative window of infectivity is the collection of plasma and serum from the NHLBI longitudinal study of approximately 14 chimpanzees experimentally infected with HIV. In addition, the Institute's blood specimen repository has serial samples from over 100 blood recipients who developed post-transfusion HCV. These specimens can be used to prepare coded panels which the Institute will make available to the contractor.
- (5) Appropriate facilities for biohazard containment must be available for the work proposed. In most circumstances, some work with infectious viruses, will be necessary and may require a P3 facility. Specimens from persons infected with viruses will be evaluated; procedures and facilities must be in place for handling these samples in the laboratory. Furthermore, the procedures and facilities to obtain informed consent, to code the samples and to maintain confidentiality of test results must also be established and available at the start of the contract.

Essential equipment is that which is normally found in microbiological, virological and chemical isolation facilities. (As a part of the facility portion of the proposal, the contractor must identify hazards to personnel or the environment from HIV and other viruses and the steps to be taken to control these hazards).

II. APPLICABLE RFP REFERENCES

This section identifies the items located in the Streamlined RFP References that are applicable to this Request For Proposal (RFP).

- A. The entire file entitled "STANDARD RFP INSTRUCTIONS AND PROVISIONS" is applicable to this RFP, except as modified by the inclusion of items from the "OPTIONAL RFP INSTRUCTIONS AND PROVISIONS" below.
- B. The following items are applicable from the file entitled "OPTIONAL RFP INSTRUCTIONS AND PROVISIONS." The full text of the provisions is available in the file. List of provisions which apply to this specific RFP:
 - E. Late Proposals, Modifications of Proposal, and Withdrawals of Proposals
 - F. Human Subjects
 - H. Small, Small Disadvantaged, and Women-Owned Small Business Subcontracting Plan
 - J. Inclusion of Women and Minorities in Research Involving Human Subjects
 - O. "JUST IN TIME"
 - R. Inclusion of Children in Research Involving Human Subjects
- C. The following items are applicable to this specific RFP and are located in the file entitled "FORMS, FORMATS, ATTACHMENTS" under Streamlined RFP References:

SUBMIT WITH TECHNICAL PROPOSAL (with original and every copy of technical proposal)

- 1. Technical Proposal Cover Sheet
- 2. Summary of Current and Proposed Activities
- 3. Technical Proposal Cost Information

SUBMIT WITH BUSINESS PROPOSAL:

- 1. Contract Pricing Proposal Cover Sheet, with every copy of business proposal.
- 2. Proposal Summary and Data record, NIH-2043, with every copy of business proposal.
- 3. Disclosure of Lobbying Activities, OMB SF-LLL, only one completed and signed original. This form is not required if there are no lobbying activities to disclose.
- 4. Representations and Certifications, with original.
- 5. Agreement between offeror and Industry that deals with any aspect of the conduct of the study, access to its results or interpretations or publication thereof, or financial or in-kind support thereof, with original.
- 6. Protection of Human Subjects Assurance/Identification/Certification/Declaration, OF 310.

OTHER—TO BE SUBMITTED LATER:

1. Certificate of Current Cost or Pricing Data, NIH-1397, to be submitted with Final Proposal Revision, as directed by the Contracting Officer.

ANTICIPATED TO BE INCLUDED AS CONTRACT ATTACHMENTS:

- 1. Invoice/Financing for Cost Reimbursment Type Contracts, NIH(RC)-1
- 2. Procurement of Certain Equipment, NIH(RC)-7
- 3. NIH 2706, Financial Report for Individual Project/Contract Instructions
- 4. NIH 2706, Financial Report for Individual Project/Contract Form
- 5. Research Patient Care Costs, NIH(RC)-11
- D. The "SAMPLE CONTRACT FORMAT-GENERAL" is applicable.

III. Project Information

Background and History

Organ transplantation in the United States is well established and widespread. In 1990 about 4,500 donors contributed approximately 15,000 solid organs to transplantations performed in 261 transplant centers. An instance of transmission of HIV through transplantation has focused attention on these human organ transplantation procedures. Solid organs have the potential to transmit HIV and other viruses from donors to recipients. Contrary to information received from a blood donor, there is no opportunity to question an organ donor directly about behavior that may have put him/her at risk for HIV (or other) infection.

The prevalence of HIV antibodies among potential organ donors is approximately 1.3 %. Using this estimate, it is anticipated that about one HIV-infected donor in the seronegative window of infectivity is accepted for organ recovery each year. This would mean that about 10 recipients are at risk of HIV infection each year from receiving organs and tissues recovered from an HIV antibody-negative donor. Thus, in this setting, there is a clear need to "close" the window of infectivity by direct virus nucleic acid screening of potential donors.

Presently available information indicates that the first detectable evidence for infection with HIV is a burst of viral RNA in circulating plasma about 7-10 days after the infecting episode. Hence, the solicitation calls for a test to detect this viral RNA. Unless the test proposed is 100% specific for the virus target, an offeror must propose an approach to a confirmatory test.

Present information also indicates that there is a prolonged period of HCV viremia before clinical disease (including laboratory tests, such as ALT) and HCV antilbodies develop. The availability of an assay to detect HCV RNA could reduce transplantation transmission of that virus by reducing the infectious, test-negative (antibody) window by several weeks. Accordingly, a companion test, multiplexed with one for HIV RNA, must also be developed and brought to clinical availability. As with the HIV RNA assay system, an offeror must also propose an approach to a confirmatory test for HCV. Furthermore, the offerors must provide suitable evidence that patent issues surrounding RNA testing for HCV have been acceptably addressed and resolved.

Therefore, the National Heart, Lung, and Blood Institute (NHLBI) wishes to support research which will focus on the reduction or elimination of the undetected window of infectivity for infectious agents in organs from donors by refining existing techniques for use in these situations. The most promising technologies appear to be nucleic acid amplification systems such as polymerase chain reaction, ligase chain reaction, nucleic acid-based sequence amplification, strand displacement amplification, branched DNA, and transcription-mediated amplification. Innovative adaptations of these gene amplification and detection methods are expected to lead to efficient and reliable assays suitable for fool-proof performance at odd hours, one by one, by less practiced staff. The major focus is on HIV-1, although a test to detect HCV is also an

important requirement. HBV, HIV-2, HTLV-I, HTLV-II, parvovirus, etc, are not a direct part of this project, although technology that can be easily modified to detect these and other blood-borne viruses is clearly important. Multiplexing the detection of HIV-1 and HCV in the same reaction is desirable. Multiplexing that will detect additional viruses, as long as HIV and HCV are sensitivity detected, can also be considered responsive to this RFP.

The Institute recognizes that donors of tissues for transplantation (e.g., bone, skin) must also be tested and that the most sensitive tests available should be used for that purpose. Nevertheless, testing of tissue donors is not time sensitive and the specimens may be batched centrally for testing. Hence, this solicitation is not seeking tests specifically focused on tissue donors.

SECTION M—EVALUATION FACTORS FOR AWARD WITH TECHNICAL EVALUATION CRITERIA

GENERAL

Proposals submitted in response to this RFP will be reviewed by (1) a primary technical review group using peer review procedures under the auspices of Review Branch, DEA and (2) a secondary review group composed primarily of members of NHLBI professional staff.

Technical factors will be paramount in the decision to award a contract. Although technical factors are paramount in the decision to award a contract, price will be considered in the source selection decision. If two or more offerors are approximately equal in technical ability, then price may become paramount. In any event, the Government reserves the right to make an award to the best advantage of the Government, price and other factors considered.

This research project involves human subjects. NIH Policy requires that women, members of minority groups and their subpopulations, and children must be included in the study population of research involving human subjects, unless a clear and compelling rationale and justification is provided with respect to the health of the subjects or the purpose of the research. Where inclusion of women, minority populations, and children are not feasible, a detailed rationale and justification for exclusion from the study population must be submitted with the technical proposal. The NHLBI will review the rationale to determine if it is appropriate with respect to the health of the subjects and/or the purpose of the research. If the rationale is not considered acceptable by the Government and you are included in the competitive range, you will be afforded the opportunity to further discuss and/or clarify your position during discussions or include women, minorities, and children in your Final Proposal Revision (FPR). If your exclusion position is still considered unacceptable by the Government after discussions, your proposal may not be considered further for award.

Past performance is not an evaluation criterion but it will be considered when determining contractor responsibility using the information required by the "Qualifications of the Offeror" portion of the "Standard RFP Instructions and Provisions" of the RFP References Directory.

Award of this RFP will be made only to offerors located in the United States. Proposals from offerors outside the United States will not be considered for award.

TECHNICAL EVALUATION CRITERIA

Weight

1. Level of development of test procedure or system and of demonstration of its feasibility to be used in screening of organ donors. Adaptability of the test or system to multiplexing.

20%	2.	Demonstration of capability to accomplish the work required under Phases I and II.
20%	3.	Qualifications and relevant experience and competence of the investigational team and appropriateness of time (effort) devoted to the project by each of the investigators, technical staff, and subcontractors, if proposed.
20%	4.	A well thought out managerial plan with suggested timetable whereby the laboratory and clinical validation of the test(s) or system(s) will be completed and submitted as part of a PLA.
10%	5.	Availability of existing and functional biohazard facilities and essential equipment to perform the proposed work for the time they shall be needed must be documented in the proposal.